



Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

UNITED STATES
DEPARTMENT OF AGRICULTURE
LIBRARY



BOOK NUMBER 1

An52An

no. 213-260

1925-1928

723023

1

AN 52 AN

no. 213-260

1925-1928

United States Department of Agriculture

SERVICE AND REGULATORY ANNOUNCEMENTS

BUREAU OF ANIMAL INDUSTRY

OCTOBER, 1925

[This publication is issued monthly for the dissemination of information, instructions, ruling, etc., concerning the work of the Bureau of Animal Industry. Free distribution is limited to persons in the service of the bureau, establishments at which the Federal meat inspection is conducted, public officers whose duties make it desirable for them to have such information, and journals especially concerned. Others desiring copies may obtain them from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 5 cents each, or 25 cents a year. A supply will be sent to each official in charge of a station or branch of the bureau service, who should promptly distribute copies to members of his force. A file should be kept at each station for reference.]

CONTENTS

	Page
Changes in directory.....	93
Notice regarding meat inspection.....	94
Sex of suspect and retained cattle carcasses.....	94
Animals slaughtered under Federal meat inspection, September, 1925.....	95
Causes for condemnation of carcasses, August, 1925.....	95
Imports of food animals and meat products.....	95
Foreign meat-inspection officials.....	96
Summary of tuberculosis-eradication work in cooperation with States, September, 1925.....	96
Licenses and permits for veterinary biological products.....	97
Anti-hog-cholera serum and hog-cholera virus produced under veterinary licenses, September, 1925.....	98
Ascariids in cattle.....	98
Bureau employees to patronize Kansas City, Mexico & Orient Railroad Co.....	98
Results of prosecutions for violations of laws.....	98
Publications for distribution.....	99
New publications of the bureau.....	99
Organization of the Bureau of Animal Industry.....	100

CHANGES IN DIRECTORY

Meat Inspection Granted

- *2-ND. Armour & Co., Fargo, N. Dak.
- *2-SD. Armour & Co., Huron, S. Dak.
- 170. D. C. Blacker (Inc.), 43 South Cruse Street, Indianapolis, Ind.
- 253. United Kosher Sausage Co., 3661-3669 Iron Street, Chicago, Ill.
- *392. Humphrey Supply Co., End Alameda Street, Reno, Nev.
- 392-A. Humphrey Supply Co., 645 Sierra Street, Reno, Nev.
- 845. Carmel Kosher Provision Co., 206 Meeker Avenue, Brooklyn, N. Y.

Meat Inspection Withdrawn

- 265. United Serum Co., Wichita, Kans.
- 287. Rosslyn Packing & Ice Co., Rosslyn, Va.
- 436. Oluff Larson, Brooklyn, N. Y.
- 555-C. Portland Rendering Co., East Deering, Me.

* Conducts slaughtering.

Change in Name of Official Establishment

*889. United Packing Co., South St. Paul, Minn., instead of Katz Packing Co. 128. Swift & Co., and the Sturtevant & Haley Beef & Supply Co., 52 Somerville Avenue, Somerville, Mass., instead of the Sturtevant & Haley Beef & Supply Co.

*235. Western Packing & Provision Co., 3830 South Morgan Street, Chicago, Ill., and Allied Packers (Inc.); W. S. Forbes & Co. (Inc.); Klinck Packing Co. (Inc.); C. Klinck Packing Co.; the Independent Packing Co.; Independent Packing Co. (Inc.); Louis Pfaelzer & Sons; Louis Pfaelzer & Sons Co.; Parker Webb Co.; Parker Webb & Co.; F. Schenk & Sons Co.; Chas. Wolff Packing Co.

Change in Name and Address of Official Establishment

272 E. H. Wetherbee (Inc.), 293-295 Como Avenue, St. Paul, Minn., instead of E. H. Wetherbee, 393 East Syndicate Street.

178 Indianapolis Abattoir Corp., Morris and Drover Streets, Indianapolis, Ind., instead of Indianapolis Abattoir Co., Morris Street and White River.

Change in Address of Official in Charge

Dr. F. N. Elwell, care Dr. F. D. Ketchum, 31 Exchange Building, U. S. Stockyards, Wichita, Kans., instead of 4th floor, Federal Building.

Dr. S. V. Ewers, 120 South Lilly Street, Moscow, Idaho, instead of P. O. box 245.

Dr. A. F. Staub, 324 New Post Office Building, New Orleans, La., instead of 323-324 same building.

Mr. Fred S. Hultz succeeds Mr. Earl B. Krantz in charge of the U. S.—Wyoming Horse-Breeding Station, Laramie, Wyo.

New Stations

Fargo, N. Dak., meat inspection. Dr. J. T. Cullen, care Armour & Co.

Huron, S. Dak., meat inspection. Dr. P. P. Taylor, care Armour & Co.

Name Removed from Address List

Dr. L. E. Lyons, Jackson, Miss. (The work and employees under his supervision have been assigned to Dr. Wilbur McPherson, Jackson, Miss.)

Substations Discontinued

East Deering, Me., meat inspection, substation of Portland, Me.

Rosslyn, Va., meat inspection, substation of Washington, D. C.

NOTICE REGARDING MEAT INSPECTION

SEX OF SUSPECT AND RETAINED CATTLE CARCASSES

Referring to instructions in Service and Regulatory Announcements for June, 1925, page 6, concerning the reporting of the sex of suspect and retained tuberculosis cattle carcasses on M. I. Forms 112-D and 112-F, inspectors are informed that until further notice the reporting of the sex on these forms should be discontinued.

* Conducts slaughtering.

ANIMALS SLAUGHTERED UNDER FEDERAL MEAT INSPECTION, SEPTEMBER, 1925

Station	Cattle	Calves	Sheep	Goats	Swine
Baltimore.....	8,214	1,330	2,491	1	52,802
Brooklyn.....	5,374	9,181	26,449	-----	-----
Buffalo.....	10,592	2,889	11,295	-----	75,606
Chicago.....	174,511	46,790	251,297	490	345,859
Cincinnati.....	12,402	7,300	6,091	10	58,074
Cleveland.....	8,987	10,785	14,987	-----	56,325
Denver.....	9,011	2,251	9,568	-----	19,180
Detroit.....	6,513	6,720	15,701	-----	70,960
Fort Worth.....	38,262	52,996	12,692	1,054	13,345
Indianapolis.....	15,264	2,793	5,902	-----	71,423
Jersey City.....	4,778	7,956	26,824	-----	49,192
Kansas City.....	124,358	37,978	118,830	1,277	125,222
Milwaukee.....	10,778	25,378	6,887	-----	73,762
National Stock Yards.....	42,592	10,501	22,719	1,117	104,913
New York.....	27,195	44,164	141,767	277	70,651
Omaha.....	78,833	13,843	135,491	38	128,751
Philadelphia.....	9,850	6,934	18,677	-----	70,287
St. Louis.....	17,638	4,990	4,983	25	119,471
Sioux City.....	34,730	5,470	25,421	-----	97,165
South St. Joseph.....	42,349	8,672	57,751	-----	58,722
South St. Paul.....	47,457	39,819	51,885	-----	126,406
All other establishments.....	136,495	74,247	118,129	710	809,771
Total: September, 1925.....	866,183	422,487	1,085,837	4,999	2,597,887
September, 1924.....	870,171	419,113	1,149,675	2,323	2,856,960
9 months ended September, 1925.....	6,998,957.	4,023,067	9,057,911	15,316	31,549,340
9 months ended September, 1924.....	6,999,025	3,653,588	8,921,438	18,418	38,133,249

Horses slaughtered at all establishments, September, 1925, 2,560. Inspections of lard at all establishments, 99,072,665 pounds; compound and other substitutes, 54,653,465 pounds. Corresponding inspections for September 1924: Lard, 116,232,804 pounds; compound and other substitutes, 26,620,480 pounds.

(These totals do not represent actual production, as the same lard or compound may have been inspected and recorded more than once in the process of manufacture.)

CAUSES FOR CONDEMNATION OF CARCASSES, AUGUST, 1925

Cause	Cattle	Calves	Sheep	Swine
Emaciation.....	555	104	378	95
Hog cholera.....	-----	-----	-----	1,588
Inflammatory diseases.....	662	151	495	1,448
Immaturity.....	-----	164	-----	-----
Tuberculosis.....	4,291	68	-----	5,116
All other causes.....	1,285	238	492	2,672
Total.....	6,793	725	1,365	10,919

IMPORTS OF FOOD ANIMALS AND MEAT PRODUCTS

The statements following show the imports of food animals and of meats and meat food products inspected by the Bureau of Animal Industry during September, 1925, with figures for other periods for comparison.

Imports of food animals

Country of export	Cattle	Swine	Sheep	Goats
Mexico.....	7,249	5	1,250	-----
Canada.....	13,922	1,511	5,058	10
Great Britain.....	40	-----	-----	-----
New Zealand.....	-----	-----	3	-----
Total: September, 1925.....	21,211	1,516	6,311	10
September, 1924.....	18,178	5,391	10,621	2,378
9 months ended September, 1925.....	137,277	88,351	52,325	207
9 months ended September, 1924.....	141,847	16,655	36,698	10,106

Imports of meat and meat food products

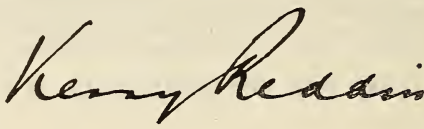
Country of export	Fresh and refrigerated		Canned and cured	Other products	Total weight
	Beef	Other			
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Argentina.....	32, 253	-----	164, 942	-----	197, 195
Australia.....	-----	-----	3, 672	226, 500	230, 172
Canada.....	494, 266	1, 087, 728	101, 523	63, 052	1, 746, 569
Uruguay.....	47, 200	-----	588, 211	-----	635, 411
Other countries.....	-----	-----	108, 448	15, 853	124, 301
Total: September, 1925.....	573, 719	1, 087, 728	966, 796	305, 405	2, 933, 648
September, 1924.....	565, 190	1, 061, 123	754, 552	568, 721	2, 949, 586
9 months ended September, 1925.....	4, 069, 583	8, 886, 661	9, 828, 715	1, 976, 400	24, 761, 359
9 months ended September, 1924.....	10, 168, 217	8, 317, 079	8, 751, 347	1, 902, 648	29, 139, 291

Condemned in September: Beef, 8 pounds; pork, 3,261 pounds; total, 3,269 pounds.

Refused entry: Pork, 3,038 pounds.

FOREIGN MEAT-INSPECTION OFFICIALS

The following is an additional name and facsimile signature of a foreign national Government official authorized to sign and issue certificates of inspection for meat and meat food products offered for importation into the United States:

Country and name	Signature
IRELAND Kerry Reddin.....	

LICENSES AND PERMITS FOR VETERINARY BIOLOGICAL PRODUCTS**LICENSE ISSUED**

United States veterinary license No. 41, dated October 1, 1925, was issued to Kinsley Laboratories (Inc.), 400-406 New Center Building and southeast corner of Seventeenth and Wyoming Streets, Kansas City, Mo., for the preparation of the following products: Canine distemper antigen; anticanine-distemper serum.

PERMIT ISSUED

Permit No. 6, dated October 7, 1925, was issued to A. Charklian, 500 Fifth Avenue, New York, N. Y., for the importation of the following products manufactured by Laboratoire de Bactériologie de Laigle, Laigle, France: Fowl typhoid and fowl cholera mixed bacterin; mastitis mixed bacterin (bovine); endometritis mixed bacterin (bovine and equine); distemper mixed bacterin (equine); infectious abortion mixed bacterin (bovine); hemorrhagic-septicemia and infectious enteritis mixed bacterin (swine).

LICENSE TERMINATED

United States veterinary license No. 49, issued August 27, 1924, to the Slee Laboratories, Swiftwater, Pa., was terminated October 6, 1925.

SUMMARY OF TUBERCULOSIS-ERADICATION WORK IN COOPERATION WITH STATES, SEPTEMBER, 1925

State	Tuberculin tests during month			Total to date			Inspector in charge	State official
	Herds or lots	Cattle tested	Cattle re-acted	Once tested-free herds	Accredited herds	Herds under supervision		
Ala.....	74	1,831	0	2,593	187	3,346	R. E. Jackson.....	C. A. Cary, Auburn.
Ariz.....	298	2,911	196	3,601	21	4,665	F. L. Schneider.....	S. E. Douglas, Phoenix.
Ark.....	83	730	2	2,898	26	3,289	H. L. Fry.....	J. H. Bux, Little Rock.
Calif.....	70	1,301	55	2,298	79	2,379	R. Snyder.....	J. P. Iverson, Sacramento.
Colo.....	29	1,059	17	1,119	71	1,361	W. E. Howe.....	C. G. Lamb, Denver.
Conn.....	178	2,873	173	683	732	2,001	R. L. Smith.....	J. M. Whittlesey, Hartford.
Del.....	165	823	51	2,020	1,039	3,637	W. G. Middleton.....	O. A. Newton, Bridgeville.
D. C.....	57	101	0	253	26	286	J. A. Kiernan.....	
Fla.....	83	1,465	6	5,898	379	6,710	J. G. Fish.....	J. V. Knapp, Tallahassee.
Ga.....	118	470	0	7,291	39	8,091	A. L. Hiramman.....	P. F. Bahnsen, Atlanta.
Idaho.....	845	5,645	19	21,267	87	24,367	W. A. Sullivan.....	W. R. Smith, Boise.
Ill.....	6,256	60,822	1,994	71,986	1,203	86,992	J. J. Lintner.....	F. A. Laird, Springfield.
Ind.....	2,427	16,593	207	45,801	13,672	60,420	J. E. Gibson.....	R. C. Julien, Indianapolis.
Iowa.....	5,696	94,001	1,275	57,517	5,792	96,927	J. A. Barger.....	M. G. Thornburg, Des Moines.
Kans.....	925	10,523	97	20,227	930	21,925	N. L. Townsend.....	J. H. Mercer, Topeka.
Ky.....	994	5,398	23	40,676	50	47,364	W. F. Biles.....	W. H. Simmons, Frankfort.
La.....	354	4,596	29	2,569	34	6,152	A. F. Staub.....	E. P. Flower, Baton Rouge.
Me.....	1,669	9,772	59	14,666	2,614	16,380	J. B. Reidy.....	H. M. Tucker, Augusta.
Md.....	1,444	11,841	1,856	6,957	1,592	14,262	T. A. Ladson.....	James B. George, Baltimore.
Mass.....	146	3,003	925	724	293	1,384	E. A. Crossman.....	L. H. Howard, Boston.
Mich.....	4,196	33,430	222	67,641	173	70,441	T. S. Rich.....	H. W. Norton, jr., Lansing.
Minn.....	6,139	111,262	4,299	18,959	6,567	27,629	W. J. Fretz.....	C. E. Cotton, St. Paul.
Miss.....	44	1,019	0	1,896	127	2,041	W. McPherson.....	P. P. Garner, Jackson.
Mo.....	274	2,997	4	54,621	868	57,898	Ralph Graham.....	H. A. Wilson, Jefferson City.
Mont.....	310	5,161	29	20,218	108	21,037	J. W. Murdoch.....	W. J. Butler, Helena.
Nebr.....	1,030	13,066	154	25,166	184	26,647	W. C. Herrold.....	C. H. Hays, Lincoln.
Nev.....	51	797	3	2,167	11	2,956	L. C. Butterfield.....	Edwards Record, Reno.
N. H.....	169	3,023	472	1,931	1,912	3,942	E. A. Crossman.....	A. L. Felker, Concord.
N. J.....	339	5,095	218	1,709	634	2,338	W. G. Middleton.....	J. H. McNeil, Trenton.
N. Mex.....	3	888	3	3,333	12	3,609	F. L. Schneider.....	Mat. Keenan, Albuquerque.
N. Y.....	6,642	68,280	7,049	27,116	15,432	54,814	H. B. Leonard.....	H. J. Henry, Albany.
N. C.....	3,609	8,411	35	167,717	117	181,739	W. C. Dendinger.....	Wm. Moore, Raleigh.
N. Dak.....	234	4,017	117	21,083	2,967	27,218	H. H. Cohenour.....	W. F. Crewe, Bismarck.
Ohio.....	3,790	28,149	1,134	46,102	1,292	51,956	A. J. De Fosset.....	F. A. Zimmer, Columbus.
Okl.....	28	668	3	81	309	420	H. Grafke.....	J. A. Whitehurst, Oklahoma City.
Oreg.....	2,569	16,517	119	57,626	888	58,608	S. B. Foster.....	W. H. Lytle, Salem.
Pa.....	5,844	37,649	2,758	39,813	3,808	48,974	P. E. Quinn.....	T. E. Munce, Harrisburg.
R. I.....	11	359	130	11	40	83	E. A. Crossman.....	E. E. Robinson, Providence.
S. C.....	384	1,848	1	851	182	6,476	W. K. Lewis.....	W. K. Lewis, Columbia.
S. Dak.....	135	4,262	66	623	548	1,312	J. O. Wilson.....	M. W. Ray, Pierre.
Tenn.....	569	3,398	43	14,653	242	15,078	H. M. O'Rear.....	W. B. Lincoln, Nashville.
Tex.....	71	2,358	13	725	238	1,191	L. J. Allen.....	N. F. Williams, Fort Worth.
Utah.....	578	3,600	20	10,155	90	11,123	F. E. Murray.....	W. H. Hendricks, Salt Lake City.
Vt.....	354	6,288	552	1,548	3,626	7,725	L. H. Adams.....	Edward H. Jones, Montpelier.
Va.....	556	4,551	48	5,988	1,643	7,902	R. E. Brookbank.....	J. G. Ferneyhough, Richmond.
Wash.....	1,122	10,508	216	35,059	81	37,538	J. C. Exline.....	Robert Prior, Olympia.
W. Va.....	565	3,753	21	6,702	644	7,496	H. M. Newton.....	John W. Smith, Charleston.
Wis.....	4,536	47,092	481	63,163	7,191	74,611	J. S. Healy.....	John D. Jones, jr., Madison.
Wyo.....	165	1,423	4	6,203	5	6,952	John T. Dallas.....	A. W. French, Cheyenne.
Total.....	66,228	665,627	25,198	1,013,904	78,805	1,231,692		

ANTI-HOG-CHOLERA SERUM AND HOG-CHOLERA VIRUS PRODUCED UNDER VETERINARY LICENSES, SEPTEMBER, 1925

	Cubic centimeters
Ordinary serum.....	19, 058, 321
Clear serum.....	16, 519, 555
Total serum.....	35, 577, 876
Simultaneous virus.....	4, 342, 098
Hyperimmunizing virus.....	8, 973, 858

ASCARIDS IN CATTLE

The bureau is making an effort to obtain information regarding the frequency of the occurrence of ascarids in cattle in the United States. Through the co-operation of Dr. A. F. Staub, inspector in charge at New Orleans, data on about 5,000 full-grown cattle and an equal number of calves have been received. Information from other points in the United States, particularly in the Southern States, is desired. Bureau employees therefore are requested to make an effort to supply this information if possible.

Representative specimens of different sizes should be preserved in about 10 per cent formalin and forwarded to the Zoological Division for specific determination, since two species of ascaris are known to occur in American cattle, one species (*Ascaris vitulorum*) being, so far as known, a strictly bovine parasite, and the other species (*A. lumbricoides*) being found in hogs, human beings, and other hosts.

Any information and help on this subject will be appreciated.

BUREAU EMPLOYEES TO PATRONIZE KANSAS CITY, MEXICO & ORIENT RAILROAD CO.

As the Kansas City, Mexico & Orient Railroad Co. has authorized the application of its accounts receivable from Government traffic to its indebtedness to the United States, it is requested that, whenever possible, without increased cost to the department, official travel be performed and freight shipments be consigned over this system.

RESULTS OF PROSECUTIONS FOR VIOLATIONS OF LAWS

Penalties have been imposed in prosecutions for violations of regulatory laws, as reported to the bureau, as follows:

Meat-Inspection Law

V. J. Rocha & Co., Elizabethport, N. J., \$25.
H. H. Steinmetz Co., Allentown, Pa., \$25.
Roman J. Bogart, Allentown, Pa., \$25.

Livestock Quarantine Law

American Railway Express Co. (4 cases), interstate transportation of cows and calves without tuberculin test, \$400 fines.

Chicago, Milwaukee & St. Paul Railway Co., interstate transportation of infectious car, \$100 fine.

Same company, interstate transportation of 1 dead animal in the same car with live animals, \$100 fine.

William H. Hinkle, Bardstown, Ky., interstate shipment of 25 cows and 10 calves without tuberculin test, \$100 fine.

Twenty-Eight-Hour Law

Atchison, Topeka & Santa Fe Railway Co., \$100 fine.

Nashville, Chattanooga & St. Louis Railway, \$100 fine.

PUBLICATIONS FOR DISTRIBUTION

The bureau has recently come into possession of a reserve supply of some of its annual reports. This series, in the form of bound volumes containing reports of operations and research, began with the organization of the bureau, in 1884, and was discontinued with 1911. Copies of the available numbers will be sent, on request, to bureau employees, other interested persons, and scientific and educational institutions and libraries.

A number of department bulletins on various subjects of interest to livestock specialists, veterinarians, and others can also be supplied.

A list of the available publications follows.

Annual Reports

Annual Reports of the Bureau of Animal Industry for 1889-1890, 1895-96, 1897, 1899, 1900, 1902, 1904, 1905, 1906, 1908, 1911.

Department Bulletins

No. 589. The 28-Hour Law Regulating the Interstate Transportation of Livestock.

No. 628. Wintering and Fattening Beef Cattle in North Carolina.

No. 631. Five Years' Calf-Feeding Work in Alabama and Mississippi.

No. 662. Vesicular Stomatitis of Horses and Cattle.

No. 761. A Comparison of Concentrates for Fattening Steers in the South.

No. 762. A Comparison of Roughages for Fattening Steers in the South.

No. 800. The Whorled Milkweed (*Asclepias Galioides*) as a Poisonous Plant.

No. 928. Substitutes for Sucrose in Curing Meats.

No. 929. Cottonseed Meal for Horses.

No. 942. Poisonous Properties of the Whorled Milkweeds *Asclepias Pumila* and *A. Verticillata* Var. Geyeri.

No. 969. The Mexican Whorled Milkweed (*Asclepias Mexicana*) as a Poisonous Plant.

No. 996. Flushing and Other Means of Increasing Lamb Yields.

NEW PUBLICATIONS OF THE BUREAU

[The bureau keeps no mailing list for sending publications to individual employees, but publications are sent in bulk to officers in charge for distribution to members of their forces. The number of copies sent varies with the subject or nature of the publication and the number and class of employees. Officers in charge will use their judgment and distribute publications to best advantage. So far as possible additional copies will be furnished on request.]

Farmers' Bulletin 576 (revised). Breeds of Sheep for the Farm. By F. R. Marshall. (Revised by D. A. Spencer, Animal Husbandry Division.) Pp. 14, figs. 10.

An Approximate Method of Calculating Coefficients of Inbreeding and Relationship from Livestock Pedigrees. By Sewall Wright and Hugh C. McPhee, Animal Husbandry Division. Journal of Agricultural Research, vol. 31, No. 4, August 15, 1925, pp. 377-383. (Separate A-95.)

The Relationship Between the Weight of Eggs and the Weight of Chicks According to Sex. By M. A. Jull and J. P. Quinn, Animal Husbandry Division. Journal of Agricultural Research, vol. 31, No. 3, August 1, 1925, pp. 223-226. (Separate A-97.)

Amendment 1 to B. A. I. Order 282. Regulations governing the appraisalment of tuberculous animals and expenditures on account of the control and eradication of tuberculosis of animals. Dated and effective September 26, 1925. P. 1 (mimeographed).

Amendment 5 to B. A. I. Order 294. Declaring names of counties placed in modified accredited areas for tuberculosis. (Declares the following-named counties to be modified accredited areas for three years: Jewell and Johnson, Kans.; Kent and Schoolcraft, Mich.; Anson, Martin, and Rutherford, N. C.; Stutsman, N. Dak.; and Ashland and Bayfield, Wis.) Dated October 1, 1925. P. 1 (mimeographed).

ORGANIZATION OF THE BUREAU OF ANIMAL INDUSTRY

Chief: JOHN R. MOHLER.

Administrative Assistant: CHARLES C. CARROLL.

Chief Clerk: J. R. COHRAN.

Editor: D. S. BURCH.

Animal Husbandry Division: E. W. SHEETS, chief.

Biochemic Division: M. DORSET, chief.

Field Inspection Division: A. W. MILLER, chief.

Division of Hog-Cholera Control: U. G. HOUCK, chief.

Meat Inspection Division: R. P. STEDDOM, chief.

Pathological Division: JOHN S. BUCKLEY, chief.

Tick Eradication Division: R. A. RAMSAY, chief.

Tuberculosis Eradication Division: J. A. KIERNAN, chief.

Division of Virus-Serum Control: D. I. SKIDMORE, chief.

Zoological Division: MAURICE C. HALL, chief.

Experiment Station: E. C. SCHROEDER, superintendent.

Office of Accounts: GEORGE F. TUCKER, in charge.

Office of Personnel: GEORGE H. RUSSELL, in charge.

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.

AT

5 CENTS PER COPY

SUBSCRIPTION PRICE, 25 CENTS PER YEAR

▽

